# Lake Roosevelt Visitor Guide

# Forest Health at Lake Roosevelt

Preserving or restoring native ecological communities is vital to the National Park Service mission. Carrying out this mission includes restoring the pro cesses that created and maintained these communities for centuries. This may sound straightforward, but it is not a simple task. The landscapes we see today are quite different from those of a century ago. They have been changed by logging, grazing, homesteading and development; and they have been changed substantially by the exclusion of fire.

Every
ecosystem has
a characteristic
disturbance
regime. This
may be wind,
flooding, insect
outbreaks, lava
flows, snow
avalanches,
landslides, or
fire.
Ecosystems
have adented to

have adapted to their particular regimes. Fire adapted ecosystems always support species that are especially

suited to frequent underburns. Some of these species have survival adaptations, such as brush species that resprout from the roots. Others depend upon fire for reproduction. The seeds of ceanothus require fire in order to germinate. Some tree species such as lodgepole pine have serotinous cones, that remain sealed with resin which must be melted by the heat from an underburn before the seed falls to the ground, where it germinates in the ash. A variety of forest insects benefit from the trees that are damaged or killed by fire. Some horntail wasps are so eager to find freshly fire-killed trees in which to lay their eggs that they will actively seek out heat and

smoke, and may become a nuisance to firefighters. The Melanophila beetle, another species that lays its eggs on fire-killed trees, actually has infrared sensors that allow it to detect the presence of fire. Writing in 1943, entomologist E.G. Linsley told of Melanophila beetles descending on University of California football games, where up to 20,000 cigarettes could be burning at one time. He noted that the beetles would "annoy patrons by alighting on the clothing or

even biting."

Around the

Roosevelt

Recreation

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Overgrown forest at Cloverleaf being thinned

Douglas-fir trees. The historic vegetation structure was maintained by frequent low -intensity fires that reduced the amount of dead wood, kept brush heights down, and killed most (though not all) of the small seedlings. This process gave an advantage to ponderosa pine seedlings, which have open crowns that do not trap the heat of underburning. Frequent fires also encouraged vigorous seedlings that grew quickly, and developed thick insulating bark. Fire may have reduced dwarf mistletoe infection, since the dense, resinous growth that develops around this parasitic plant is highly flammable.

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#### Local Park Service Employee Carries Olympic Torch

If you were to visit the Fort Spokane District Office at Lake Roosevelt, one of the first people you would meet is Linda Arsenault. Linda cheerfully greets visitors and assists them



with park information. This winter, Linda was honored to serve as an Olympic Torchbearer, carrying the torch through Spokane, Washington on its way to the 2002 Winter Olympics in Salt Lake City, Utah.

Linda was chosen through a competition sponsored by Chevrolet and Coca-Cola. The contest required a 50 - word essay describing a person who embodied the Olympic Spirit by serving as

an inspiration to others or by overcoming difficult obstacles in their lives. Over 200,000 essays were submitted for the approximately 3,000 torchbearers selected nationwide. Linda's nomination cited her tireless volunteer work in Davenport, WA. It also described how she became a mentor and role model to a local high school girl who had lost her mother to multiple sclerosis.

Linda said that the experience was one of the most memorable moments in her life.

#### Sturgeon Fishing on Lake Roosevelt is Closed

All fishing for sturgeon is no longer allowed on Lake Roosevelt. This is a permanent closure to protect the dwindling population of this ancient fish. Canadian authorities took a similar step for the Canadian stretch of the Columbia River in 1994.

Following the recommendations of biologists', the Washington State Fish and Wildlife Commission voted earlier this year to ban catch -and -release fishing for sturgeon on Lake Roosevelt as of May 1, 2002.

The goal is to save the sturgeon population without placing them on the U.S. Endangered Species List. Washington state has been regulating sturgeon fishing on the Columbia since the turn of the 20th century, when

overfishing threatened to cause the fish's extinction.

Sturgeon fishing is still legal on other portions of the Columbia River. In fact, sport and commercial fishermen annually take 50,000 of these fish which can live more than 100 years.

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# Park Basics

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# ADDRESSES AND PHONE NUMBERS Park Headquarters

1008 Crest Drive Coulee Dam, WA 99116 (509)633-9441

# South District Office & Fort Spokane

44150 District Office LN N Davenport, WA 99122 (509)725 -2715 or (509)633-3830

# North District Office & Kettle Falls

1368 S Kettle Park Rd. Kettle Falls, WA 99141 (509)738-6266 or (509)633-3860

Webpage Address www.nps.gov/laro/home.htm

#### **OFFICE HOURS**

District Offices at Kettle Falls, Fort Spokane and Coulee Dam are open Monday through Friday 8:00 AM - 4:00 PM. Closed on all Federal holidays. The Kettle Falls Information Station is open June to September 2, Wednesday through Sunday. The Fort Spokane Visitor Center is open everyday mid -June to Labor Day.

#### **FEES**

There are year -round camping and boat launching fees.

#### **EXHIBITS**

The Guardhouse at Fort Spokane has free exhibits and a new video about the forts' military and Indian Boarding School history which was created with the help of the Spokane Tribe of Indians and the Colville Confederated Tribes.

On Sundays at 11:00 AM from June 29 to September 1, historic weapons demonstrations and a

presentation by a park ranger, who is a Colville tribal member, depicts the intermingled histories of these two cultures at Fort Spokane. Call 509-725-2715 for more information, and information about other programs.

#### **BOOKSTORES**

Northwest Interpretive Association sells educational materials, books, maps, and games in the Visitor Centers and at park Headquarters. The proceeds from the bookstores contribute to the interpretive and educational programs in this park.

#### NPS CAMPGROUNDS

Year -round camping is avail - able at most of the 28 National Park (NPS) managed campgrounds on a first -come, first -serve basis. There are no hook - ups or showers in any of the NPS campgrounds.

Fees: \$10 per night, per site in all developed campgrounds from May 1 to September 30. \$5 from October 1 to April 30. Valid Golden Age and Access Passport holders receive a 50% discount. For more information about this program look further on this page.

You may have two vehicles (a truck and a boat trailer, or an RV and a car, or two cars, for example) and no more than 10 people per site. Crowded conditions exist in some campgrounds, please plan ahead.

Group campsites are by reservation only. You can get an application on-line at www.nps.gov/laro/group.htm. For information about Keller Ferry, Spring Canyon, and Fort Spokane call (509)725 -2715 ext. 30. For information about Locust Grove, Hunters, Evans, or Gifford, call (509)738-6266 ext. 100.

#### BOAT LAUNCH ELEVATIONS

Lake Roosevelt is a reservoir on the Columbia River. Seasonal fluctuations regularly affect lake levels and access to boat launch facilities. For the latest lake elevation call the Bureau of Reclamation at (800)824-4916 or check our website at www.nps.gov/laro/home.htm.

#### **BOAT LAUNCHES**

Fees are charged year- round at all NPS boat launches regardless of what type of boat you have. Daily launch permits, valid for seven days from date of purchase, cost \$6.00. They may be obtained at self- registration fee stations at each launch ramp. Seasonal permits, valid through the end of the calendar year, cost \$30 from January 1-April 30; \$40 May 1-September 30; and \$20 October 1-December 31. Seasonal permits may be purchased in park Headquarters, North District, and South District Offices. You may also obtain seasonal permits by mail. Send a stamped, self -addressed envelope with a personal or cashier's check payable to the National Park Service to the Headquarters mailing address on this page. Include your Golden Age or Access Passport number if you have one, for a 50% discount.

#### FISHING LICENSE

Children 15 and younger may fish without a license. All others need a Washington State fishing license to fish Lake Roosevelt waters. You may use either a Colville Tribal or state fishing license on waters adjoining the Colville Indian Reservation. If you are fishing from shore on the Colville Reservation you must have a Colville Tribal fishing license. Call 509-634-2110 for information. The Spokane Tribe requires a Spokane Tribal fishing license when fishing from shore on the Spokane Reservation. Call 509-258-7750 Monday through Friday for information.

# GOLDEN AGE & GOLDEN ACCESS PASSPORTS

The Golden Age and Golden Access Passports are lifetime entrance passes to national parks, monuments and other areas administered by the Federal government. The passport also entitles the holder to a 50% discount on User Fees like camping and boat launch fees.

Golden Age Passports are available only to U.S. citizens or permanent residents age 62 years or older for a one time \$10 fee. Golden Access Passports are issued free of charge to U.S. citizens or permanent residents of any age who are blind or permanently disabled. You may obtain either of these passports at any of the Visitor Information Stations or District Offices in the park.

# VISITOR CENTERS & CONTACT STATIONS

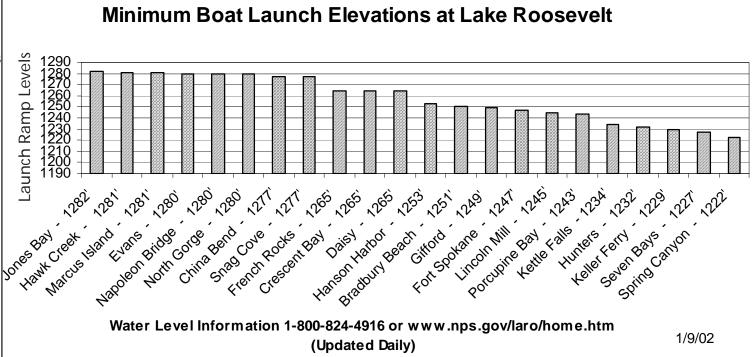
Kettle Falls Information Center is located near the entrance to the Kettle Falls campground.

Fort Spokane Visitor Center is located inside the historic Guardhouse on the grounds of Historic Fort Spokane.

Spring Canyon Contact

Station is located near the Spring Canyon swimbeach.

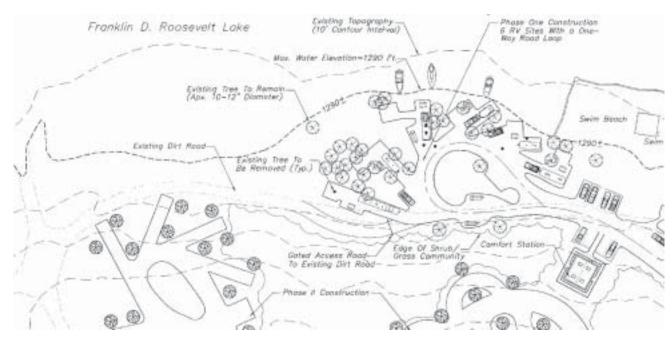
All locations offer free information, boat launch permits, Golden Age and Access Passports, and book sales. Fort Spokane has exhibits and a theater presenting interpretive videos. There are interpretive walking trails nearby each of these locations.



Due to lake fluctuation it can be dangerous to boat without an accurate navigational chart. You can purchase them at the District Offices, Visitor Information Centers or by calling (509)738-6366 x115 or on the web at www.nps.gov/laro/nwia.htm

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# Changes at Porcupine Bay, Keller Ferry, and Gifford Campgrounds



#### KELLER FERRY CAMPGROUND PROPOSED PLAN WEST OF MARINA

Lake Roosevelt National Recreation Area has proposed facility changes at the Porcupine Bay and Keller Ferry Campgrounds. The public is invited to comment on the Environmental Assessments (EAs) that are available for each project. A copy of the EAs can be requested through the mail by writing to: Superintendent, Lake Roosevelt National Recreation Area, 1008 Crest Drive, Coulee Dam, WA 99116; or by visiting our website at www.nps.gov/laro/home.htm. The comment period ends June 14, 2002.

Improvements at Porcupine Bay would include developing new sites, returning current sites to their original design (existing spaces are actually half the size of their original design), and installing more boat trailer parking.

At Keller Ferry several improvements are planned including creating campsites west of the marina, eliminating RV camping in the Day Use parking lot, and adding storage buildings at the marina.

The Gifford EA was approved March of 2002. Plans call for a new accessible restroom to be installed in the campground this year. Improvements in future years would include rerouting traffic flow. Copies of the approved plan can be requested at the above address or accessed on-line.

Due to increased visitation in these areas, improvements are being recommended to increase visitor and employee safety, assist with better traffic flow and to better utilize facilities. We invite your comments. Thank you for your interest in Lake Roosevelt National Recreation Area.

# Fishing Regulations on Lake Roosevelt Have Changed!

# There are exceptions to the new statewide walleye rule on Lake Roosevelt, the Spokane River and the Colville River, designed to increase the harvest of walleye that are of the size that prey on juvenile kokanee and native minnow species. As listed under "Special Rules" in the new regulations pamphlet, these waters now have no minimum size, a five fish daily limit and you may keep no more than one walleye over 18 inches. The Colville River from its mouth to the bridge at the town of Valley, and the Spokane River from its mouth to Seven Mile Bridge, are under the same rules as Lake Roosevelt.

#### **Statewide Slot Limit for Bass**

The slot limit for bass, wherein anglers can only keep bass less than 12 inches or greater than 17 inches, with only one bass greater than 17 inches in the five -fish daily limit, is now the standard statewide rule, instead of being applied to individual bodies of water as it formerly was.

Walleye, rainbow trout and kokanee are the star attractions of this major year- round fishery that forms the Ferry, Stevens, and Lincoln county lines. Smallmouth bass and burbot are also plentiful. With periodic drawdowns in the reservoir above Grand Coulee Dam, trout reproduction is virtually impossible, but cooperative net-pen rearing projects at Seven Bays, Keller Marina, Hunters, and Kettle Falls are providing catches. Check the latest regulations pamphlet for special trout, walleye and kokanee rules and redefined San Poil and Hawk Creek boundaries. Other catchable fish in the river and reservoir are lake whitefish and yellow perch. Effective May 1, 2002, all sturgeon fishing is permanently closed.

Be sure to follow the rules in the Washington State fishing regulations booklet. Lake Roosevelt is listed under "Special Rules, Eastside Lakes. These regulations are available on the web at www.wa.gov/wdfw/fish/regs/fishregs.htm. Below is an excerpt.

<b>ROOSEVELT LAKE</b> (Columbia River	TROUT	Year-round	None 5 TROUT -	no more than 2 over 20".
from Grand Coulee Dam to U.S	WALLEYE	Year-round	None 5 WALLEYE -	no more than 1 over 18".
Canadian border) including Hawk	Other Game Fish	Year-round	Statewide rules	
Creek downstream of the falls at				
the Hawk Creek Campground, San	KOKANEE	Year-round	None 2	KOKANEE not included in TROUT daily limit.
Poil arm, the Spokane arm down-				
stream of the SR 25 bridge & Kettle				
arm downstream of Barstow Bridge	SALMON	Year-round		Landlocked SALMON rules apply.
(see also Hawk Creek, Kettle River,				
San Poil River, Spokane River and	STURGEON	CLOSED		CLOSED to fishing for STURGEON.
Roosevelt Lake tributaries.				

#### 2001 Projects

2001 has been another busy year for completing projects to improve public access and use of the recreation area. In cooperation with the Lincoln County Road Department, the launch ramp parking area at Seven Bays was paved and striped. The Hunters parking area was landscaped and the roads in the Marcus campground were paved. Throughout the recreation area, various floating facilities were replaced and / or modified to accommodate changes in the reservoir operations. The Fort Spokane audiovisual pro gram was rewritten and updated with new graphics and music. The program has been updated from a slideshow to a DVD format. The Fort Spokane Indian Boarding School exhibit was also completed and is on display when the visitor center is open. Most of these projects were funded through the Fee Demonstration program, which enables us to retain 80% of the fees. collected here at Lake Roosevelt for local projects.

In cooperation with county weed boards, we continue our efforts to control 13 different exotic weeds through mechanical and chemical control.

Fee Demo projects for 2002 include installing new information boards at some boat ramps, replacing and modifying docks, improvements at Fort Spokane Amphitheater, upgrading some campsites for accessibility, and installing log booms at the Daisy launch ramp.

# **CLIFF DIVING IS DANGEROUS**

Last year a visitor lost his life while at Lake Roosevelt National Recreation Area. He was jumping/diving into the lake from the cliffs at the mouth of the Kettle River. Several dives were made throughout the day before the fatal one. This was not the first time someone has lost his or her life diving into the lake. In fact, this was the second death at the same location. Throughout the national recreational area there are many cliffs, bridges and other structures that may seem like optimum places to dive, but in reality are very dangerous. Serious injuries can occur from diving off structures or features that are not very high. Everything from fractured fingers to permanent paralysis can and do occur. One visitor

was permanently paralyzed

when he dove from a courtesy dock at a launch ramp into shallow water.

Lake Roosevelt is subject to frequent water level changes. An area that you have previously used for diving may not be safe at a later time, or even later in the same day. There are lots of underwater obstacles that you may be at risk of striking, including logs that float under the water. Because of the constant change in water elevation, hazards are not marked and you must take responsibility for Diving or jumping from cliffs your own safety, and that of your family.

Diving into water brings an added hazard. Hitting the water at the wrong angle could result in serious injury or unconsciousness. The odds of

drowning dramatically increase.

Due to Lake Roosevelt's cold temperature, an added hazard is hyperventilation. When your body is suddenly immersed in cold water, hyperventilation or a gasp reflex could occur. When this occurs your mouth involuntarily opens and you begin gasping, it is your body's reaction to being suddenly surrounded by cold water. This could be fatal if your face is submerged.

or other structures is dangerous. Always explore an area before diving or jumping into it, and avoid jumping into very cold water. Please play it safe while recreating at the lake.

#### **2001 Boating Accident** Statistic for Lake Roosevelt



On the National Park Service managed areas of Lake Roosevelt, the most common boat accident reported last year, involved the towing of persons. This includes water skiers, wake boarders, and inner tubers. These are some safety tips.

- Wear a US Coast Guard approved life jacket that fits and is designed for impact sports.
- Never tow in shallow areas, near shore, or in areas with debris.
- Do not tow between sunset and sunrise.
- Develop and use hand signals to communicate. Never start a tow until the skier signals they are ready and you know where the towrope is located.
- Always have an observer in addition to the driver of the boat. The driver's responsibility is to operate the boat safely and avoid other boats and objects. The observer's job is to watch the skier and communicate to the driver the skier's progress.
- Always use your skier down flag when your skier is in the water. This flag signals other boaters that a person is in the water and to slow down and stay at least 100 feet
- Never tow in channels or within 500 feet of a designated harbor, swimming beach, or mooring area. Stay at least 100 feet from a person fishing, swimming, or from a divers marker.
- Do not operate a boat under the influence of alcohol or drugs.
- Only use equipment designed for use in towing.

Most of these safety tips are federal and state regulations. If you have any questions ask a park ranger.

# Why must dogs be on a leash all of the time while visiting the park?

Visitors often ask why they must keep their dogs on a leash while they are visiting Lake Roosevelt National Recreation Area. There are many reasons.

The recreation area has nearly 1 1/2 million visitors every year. An official count of pets has never been taken here, but it is safe to say that there are hundreds of thousands of household pets brought here each year. Though your pet may behave very well at home, where they are familiar and know their territory, the campgrounds are filled with distractions and temptations.

Each year there are several reported incidences of dogs biting other dogs, and occasionally people. In two cases last year, unrestrained dogs bit other dogs and caused their owners considerable costs. The most vulnerable people to dog bites are children. A three-year-old boy was bitten in the face by an unrestrained poodle-mix. If your dog bites a person you can be sued by that person, and prosecuted by the law. The dog will be put in quarantine until it is determined that the dog does not have rabies, and it can a least no longer than 6 feet an unleasted dog: ultimately be destroyed if it is deemed to be a threat. All associated costs are born by the owner of the aggressordog.

There are dangers for your dogs as well. Traffic can be heavy near the more developed areas, and drivers do not expect dogs to be running loose. Wildlife can be a dangerous (and



This dog was no longer able to eat or take care of her puppies after tangling with a porcupine near Fort Sposometimes expensive) distraction for pets. An encounter with a porcupine is very painful. Quills can migrate through your pet internally, causing much damage and pain before exiting on their own. Badgers, cougars, and rattlesnakes can be deadly to your pets. Skunks and cheatgrass cause their own problems, as well as noxious weeds being spread by pets. A dog caught chasing wildlife can be put down by the proper authorities and the owner of that dog can be fined for that animal's behavior.

Camping is a terrific family activity, and pets are a part of the family. Just remember to keep your family safe by keeping your pets close at hand on

You cannot outrun the dog, not even an Olympic sprinter could, so do not try. It triggers a predator response.

Be aware of dogs farther ahead, change your route or turn around to avoid unleashed dogs.

If charged, get something between you and the dog's mouth - umbrella, pack, jacket, stick.

Report unrestrained or unattended animals to a Park Ranger, it could mean the safety of you or your family.

# Things to Do

Hey kids,

# Just for Kids

Want to be a Junior A visit to Lake Roosevelt is really something to look forward to. Why?

Because there is so much to see and do at the lake. You can camp, swim, fish, boat, attend a program, or play on the beach or at a playground. The opportunities to enjoy Lake Roosevelt are almost limitless. Let this page be

your guide to having fun at Lake Roosevelt National Recreation Area.

The best way for kids to enjoy Lake Roosevelt is through the Junior Ranger Program. The Junior Ranger Program is designed for kids between ages five to fourteen, but any age can participate. The first step is to pick up a free Junior Ranger activity newspaper from any park ranger, campground host, or at the Fort Spokane Visitor Center or the Visitor Information Stations at Kettle Falls or Spring Canyon. As part of the program you must attend a rangerguided activity. These activities include games, art projects, demonstrations, nature walks, living history demonstrations or canoe trips and are offered all summer. Schedules of summer activities for each week are posted on most park bulletin boards. The ranger at the program must sign your Junior Ranger newspaper after the program is over. You will also need to walk a trail in the park. If there are no trails in the area you are visiting, take a walk with your family through the campground or along the beach. Finally, take your completed newspaper to a park ranger at one of the visitor contact stations or the visitor center listed on page 2 of this newspaper. They will check your answers, help you correct your mistakes, and have you take the official Junior Ranger pledge. You will be awarded your free Junior Ranger Patch to take home! If you do not finish the activities in the Junior Ranger newspaper while you are visiting the park, you can mail it in and receive your patch and paper back through the mail.

There are many things to do at Lake Roosevelt. You could visit each summer for years and still not see it all! There are many campgrounds to explore on the lake, some of which can only be reached by boat. Some of the lager campgrounds and swimming areas have playground equipment.

If you do visit the different areas at Lake Roosevelt, you will notice as you travel up and down the lake, the landscape changes dramatically. Down by Grand Coulee Dam, there are almost no trees. At Fort Spokane there are some patches of ponderosa pine. There are many more pine trees as the lake continues north. The forests are continuous at Kettle Falls.

There is a long history along the lake which can take you back in time. Kettle Falls was the second-largest salmon fishing spot on the entire Columbia River, and the Hudson's Bay Company had a trading post called Fort Colvile very near the falls. It supplied food to people who lived as far away as Hawaii and Alaska until the 1860s. If you visit the Kettle Falls area be sure to see St. Paul's Mission, the oldest Catholic mission in Washington. Do not forget to visit Fort Spokane, near the mouth of the Spokane River. It was a 19<sup>th</sup> century military fort and a 20<sup>th</sup> century Indian Boarding School and tuberculosis hospital. Children as young as 5 years old were brought there to live for many years while they attended school. On Sunday mornings during the summer, historical re-enactors fire guns and a mountain howitzer cannon, and you can learn how to march.

Lake Roosevelt has activities for everyone. Whether you become a Junior Ranger, participate in a program or spend your whole day swimming at the beach, kids from ages 1 to 101 can find plenty to do to enjoy time at Lake Roosevelt.

# Special Events at Lake Roosevelt in 2002

Ket	Kettle Falls			
Saturday July 20	Paddle Days	11:00 to 3:00	Free lessons in canoeing, kayaking, sailing, snorkeling and much more. Bring sunscreen and wear swimclothes. Call 509-738-6366 ext. 115 for details. Four miles south of Kettle Falls.	
August 15- 16(Th.+F.)	Perseid Meteor overnight canoe trip		The Perseid Meteor Shower is best experienced in a dark quiet campground after 11PM. Join park rangers on an overnight canoe trip for the event. <b>Must RSVP</b> . Call 509-738-6366 ext. 115 to RSVP.	
Sept. 28	Public Lands Day	11:00 to 2:00	Join the National Park Service in celebrating National Public Lands by helping with a project to improve the Locust Grove trail through the	

#### Fort Spokane

IOIL	Spokaric		
June 29- 30	Living History Encampment	10 AM- 6PM/ 10 AM- 2PM	A Living History encampment with the Frontier Regulars in front of the Guardhouse at Ft. Spokane. Sunday, June 30 will mark the beginning of the historic weapons demonstrations for the summer.
August 4	Native American Artists in the Park		Along with the living history program there will be several local Native artists mostly from the Colville & Spokane Tribes featured. There will be demonstrations, storytelling and crafts for

For more information about any of these programs call 509-633-9441 ext. 110.

#### Trail Adventure

The variety of scenery and terrain offers wonderful opportunities for visitors to get out and go for a walk. There is at least one established trail in each area of the park. Take some time and explore at least one of these trails while you are here.

Mission Point Trail: Only one mile from the Kettle Falls Campground, at St. Paul's Mission, a short trail combines history and nature. There are signs along the trail explaining the history of the falls, the mission and the Hudson's Bay Company's influence on the area. The view of the river is rivaled only by the abundance of plants you will find along the trail.

Old Kettle Townsite Trail: Starting in the Kettle Falls Campground, this trail winds through the original townsite of Kettle Falls. You will see house foundations, sidewalks and fruit trees; landmarks of the past. The trail leads to the swimbeach and playground, and boasts Great Blue Herons, Osprey, and Bald Eagles.

The Sentinel Trail: Located at Fort Spokane. Signs along this trail tell how people lived here for almost 50 years. Echoes of the past can be heard along the two mile trail. Although quiet and peaceful today, the rush of the free flowing Columbia and Spokane Rivers 9,000 years ago called many Indian Tribes to the rich salmon fishery which was located here. The bugle calls that can be heard today on the parade grounds summoned soldiers to their posts 100 years ago. Today, the whisper of the wind in the box elder trees, which were planted during the Indian School period, is the same whisper children attending school here heard at the turn of the century. For the adventurous, the trail climbs approximately 300 feet to the top of the bluff, giving you a spectacular view of the fort grounds and the confluence of the rivers. This magnificent view echoes a geologic past of 13,000 years ago when huge floods carved this landscape. A trail guide about the Indian Boarding School is available.

Bunchgrass Prairie Nature Trail: The start of this short trail is in the Spring Canyon Campground. Discover wild roses, rock-eating lichens, and look closely at the different critters that call the grasslands home. A free trail guide is available at the beginning of the trail for you to use.

# Park Map

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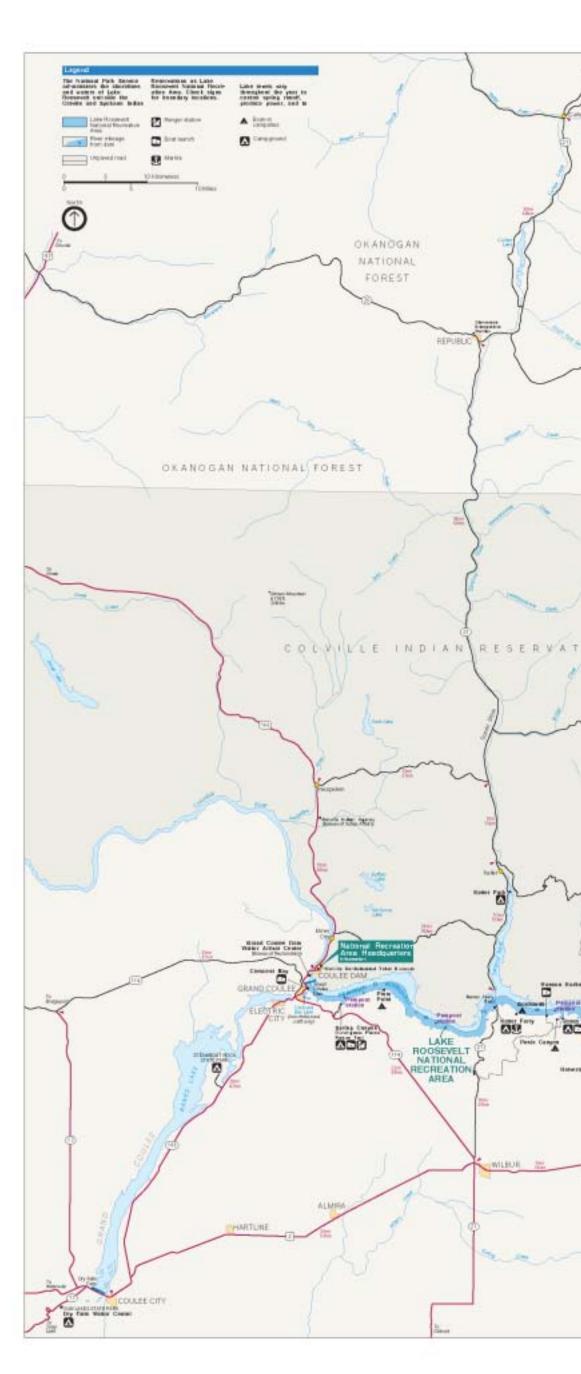
Lake Roosevelt offers majestic views in every district. There are waterfalls, rock cliffs, forests, grasslands, wild animals and miles of water. Whether you are looking to get away from everything and camp along the shores on you boat or you like the social life a developed campground has to offer, you can find what you are looking for here. If you have always visited the same area and are looking for a change why not try a different campground the next time you visit. Our website can help you plan your trip, or ask a ranger about the highlights that can be found in different districts of Lake Roosevelt National Recreation Area. The staff wishes you a very pleasant stay. The web address is www.nps.gov/laro.htm.

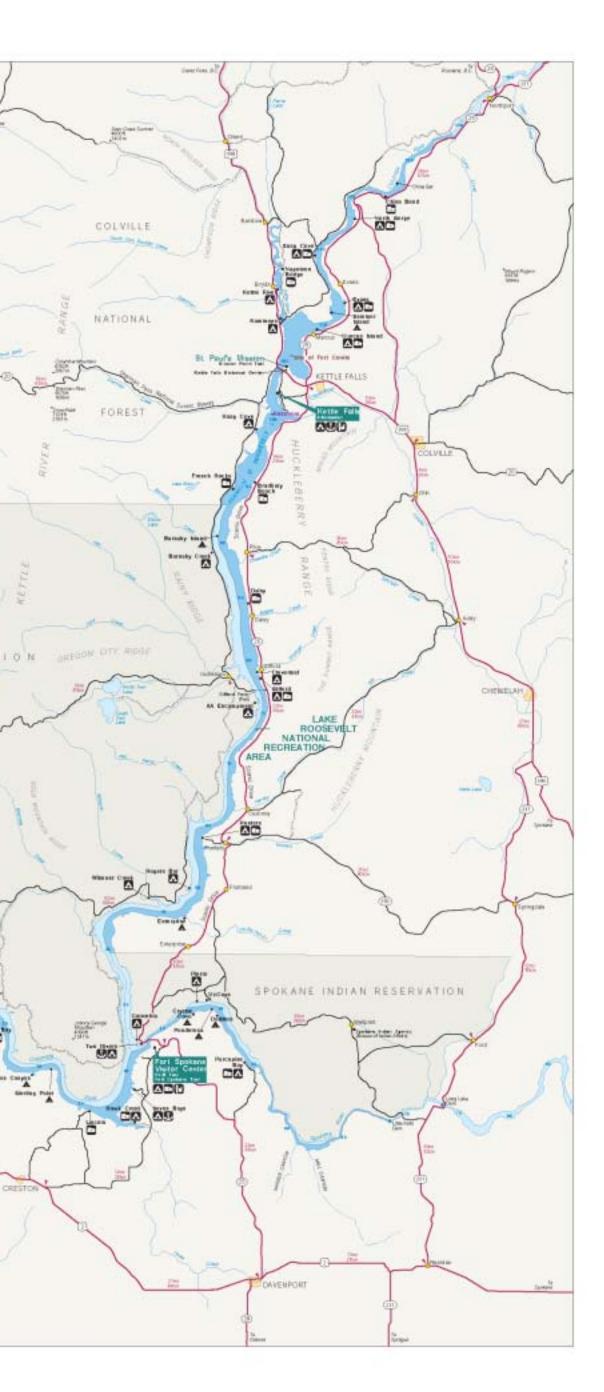
#### A comparison of regulations between managing partners on Lake Roosevelt

Regulation	National Park Service	Colville Tribe	Spokane Tribe
Loaded firearms permitted in campgrounds, picnic areas or on beaches	NO	NO	NO
Tribal fishing permit and state license required on shoreline	NO	YES	YES
Children under 16 are required to hold permit when accompanied by licensed adult	NO	NO	NO
State fishing license required while fishing from a boat	YES	YES	YES
Pets permitted off leash in developed beaches or picnic areas	NO	NO	NO
Pets permitted on leash in developed beaches or picnic areas	NO	YES	YES
Roadside camping permitted outside of developed campgrounds	NO	NO	NO
Length of stay in campgrounds limited	YES	YES	NO
Camping requires reservations	NO	NO	NO
Payment of overnight fee required at drive- in (road accessed) campgrounds	YES	YES	YES
Payment of overnight fee required at boat- in (not road accessed) campgrounds	NO	YES	NO
Fires permitted in designated fire grates in developed campgrounds (check seasonal restrictions)	YES	YES	YES
Fires permitted in undeveloped boat- in campsites (check seasonal restrictions)	NO	YES	YES
Permit required for fires built at boat- in campsites (check seasonal restrictions)	NO	YES	YES
Fireworks permitted (check seasonal restrictions)	NO	NO	YES
Boat launch permit required (with fee)	YES	NO	NO
Lawfully taken, properly tagged wildlife may be transported through area	YES	YES	YES
Driving motor vehicles on beaches or seasonally exposed lakebed	NO	NO	NO
Digging or using metal detectors permitted	NO	NO	NO



A view of Lake Roosevelt from the south part of the park.







A view of the mouth of the Kettle River at Kamloops Campground. The gorge is mostly underwater during the summer months.



Looking north from SR 25 near Gifford Campground.



Picnic gazebo in the Hunters Campground Day Use Area.



Historic Weapons demonstration presented on Sundays at Fort Spokane from the last weekend in June to Labor Day.

# Geological History

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#### The Kettle Falls Area-Geologically Speaking

The mountains, which surround the Kettle Falls area, tell an ancient story of a violent geologic past. 200 million years ago you would have seen ocean all around you in this area. Although water would have surrounded you, to the west several small continents existed Kettle Falls and Colville. To in that ocean. The Idaho/ Washington border would have been the western edge of the North American continent. Continents and ocean floor ride to the west of Lake Roosevelt. on huge plates. As the plate the But the surface of the land has ocean and small continents were riding on pushed into the North American continent, the ocean floor was pushed up and formed the mountains which



can be seen at the towns of the west the small continents crashed into the North American continent one after another forming the mountains changed since this happened. Today the mountains do not rise as high due to glaciers that covered this area as recently as 10,000 years ago.

#### Lake Roosevelt Rocks!

Did you know that gold was found years ago near Kettle Falls? And fossils have been found at Fort Spokane! These are just two of the geologic "riches" you can discover during your visit to Lake Roosevelt National Recreation Area.

The basic geology of the Lake Roosevelt area is fascinating partly because it is so diverse. Have you seen the common blackish "lava" rock south of the lake? This rock, called basalt, runs from Lake Roosevelt all the way to the Tri-cities, Yakima, Portland and even Yellowstone National Park. The rock formed from liquid lava that erupted out of great fissures (cracks) in the earth. It spread out into huge layers, then cooled to form solid rock. Some of the basalt has many holes in it, giving it an al most frothy look. The holes are evidence of gas bubbles that were in the lava when it cooled. Just like bubbles in a glass of soda-pop rise to the top, the volcanic gas bubbles in the lava moved upward when they could. They were frozen in place when the lava cooled.

Many visitors to Lake Roosevelt have noticed the column-like structures in the basalt. As some of the lava cooled, the forces of contraction (shrinking) cracked the rock into these vertical, usually six-sided, columns. Similar forces are at work when mud dries and contracts, for ming cracks.

There are many other kinds of rocks around Lake Roosevelt. Near Kettle Falls there is a black and white rock (some times also containing pink minerals) that shows swirls or banding in it. This is gneiss, (pronounced "nice"). It is what is called metamorphic rock, which means changed by great heat and pressure within the earth. You are probably already familiar with other metamorphic rocks such as marble, and perhaps slate which is used as the base of pool tables and old fashioned chalkboard. If you look at enough fist-sized rocks around Lake Roosevelt, you are sure to find some gneiss washed down with the fast moving waters of the Columbia River in earlier times.

It is fun to think what you might discover along Lake Roosevelt's shores. You could see a whole range of rocks and minerals. The reason for this is during the last Ice Age, glaciers covering Canada flowed over Kettle Falls, and to the Fort Spokane and Grand Coulee areas. The glaciers carried rocks in their ice. Some rocks and minerals traveled thousands of miles on these ice sheets before being dropped around the landscape of Lake Roosevelt. So, some rocks around Lake Roosevelt may be "visitors" from well to the north. Good luck to all of you rock enthusi asts, enjoy the variety of the rocks found at Lake Roosevelt.

#### A Tale of Two Lakes

Lake Roosevelt is an enormous, and deep, body of water. Throughout your stay you will no doubt see different parts of this great lake. It is nearly 150 miles long, and several hundred feet deep in many places. Lake Roosevelt is really the reservoir held in place by Grand Coulee Dam. Built in the 1930's, the dam is made of concrete and steel. It holds back the waters of the Columbia, Spokane, Kettle, Colville, and Sanpoil rivers.

That is the history of Lake Roosevelt in a nutshell. But there was an earlier lake in this area, one that was actually many times larger than our Lake Roosevelt.

About 15,000 years ago, near the close of the last Ice Age, glaciers covered much of what is now Lake Roosevelt, as well as the Colville Reservation and the Spokane Reservation. One part of a massive glacier east of Omak pushed down from the highlands, flowed across the valley, and blocked the Columbia River. This natural dam, made of ice rather than concrete, grew higher as the glacier continued to flow south. Eventually, it was at least three times higher than our own, concrete, Grand Coulee Dam. Naturally, river water accumulated behind the ice dam, forming a lake hundreds of feet deeper than Lake Roosevelt. Geologists call this earlier body of water Glacial Lake Columbia.

Look along the shores of Lake Roosevelt, just a foot or two above water level. You will see sands and silts laid down by Lake Roosevelt when it was just a little bit higher, . . . last month, last week, or perhaps just yesterday. Now look up at the bluffs that surround much of Lake Roosevelt. In most areas around the lake you will see sand and silt beds extending up to hundreds of feet above Lake Roosevelt. These sediments testify to the size and duration of Glacial Lake Columbia, ... an enormous lake indeed!

A Comparison of the Two Lakes

A Comparison of the I			wo Lakes		
		Lake Roosevelt Today	Glacial Lake Columbia		
	Origin of Dam	Man-made, constructed of concrete and steel	Natural, Made of glacial ice		
**	Length of Lake	From Grand Coulee Dam to near Canadian boarder	From below current dam site, extending many miles into Canada and over to Spokane		
	Typical Depth of Lake	Commonly near 200 feet near the center of the lake	Much of the lake was at least 600 feet deep		
	Impact on Salmon	Blocks salmon migration at Grand Coulee Dam	Blocked salmon migration at ice dam		
	Duration	From 1940 to present, to ???	Thousands of years		

For more information about the ice age floods visit one of the park bookstores listed on page two of this newspaper, or visit us on the web at www.nps.gov/ nwia.htm.

Glacial Lake Missoula and its Humongous Floods, by David Alt, is a new addition to the shelves of our bookstores at Lake Roosevelt. With numerous photos, drawings and maps to help tell the story of the cataclysmic floods which repeatedly occurred, changing the shape of the Northwest.

Check Out These Books! Maps of Glacial Lake Mis-<u>soula</u>

> \$6.00 Produced by the US Forest Service this is an excellent visual aide for anyone teaching or learning about these amazing geological wonders. Available at all of the park bookstores or on the Internet at www.nps.gov/ laro/nwia.htm.

<u>Cataclysms on the Columbia</u> \$14.95. This books tells both the story of the Ice Age Floods and the story of the man who first discovered their evidence, J Harlen Bretz. Available at all of the park bookstores or on the Internet at www.nps.gov/ laro/nwia.htm.

Remember that collecting things, including rocks, is not allowed at Lake Roosevelt National Recreation Area.

# Natural History

#### Variety in Bloom

If "earth laughs in flowers," as Ralph Waldo Emerson wrote, then northeastern Washington chuckles grandly: about one third of the 3,500 plants known from Washington grow here.

Our diversity of plant life comes from wide variations in elevation, precipitation, soil and rock types. Elevations along Lake Roosevelt range from the water surface of the lake which may be in the 1250 foot range in the spring to 2,600 feet on top of the cliffs near Keller Ferry: that's 1,350 feet of vertical relief. The north end of the recreation area usually receives 15-20 inches of precipitation, while the south end receives as little as 7 inches per year. Several soil and rock types add to the jumble of plant patterns on our landscape.

Throughout the summer, bands of color move up the mountain sides. To enjoy this grand plant diversity, drive and hike in different parts of the park. Visit the sagebrush-grasslands near Grand Coulee Dam, the Ponderosa pine forests growing from near Fort Spokane north, and the moist western red cedar- western hemlock forests near the Canadian boarder, to contrast the plant variety.

Though most flowers are finished blooming by the end of June in the south end of the park, there are still

opportunities to find many different flowers throughout the summer in the northern part of the recreation area. A drive along recreation area, Columbia State Highway 25, from Fort Spokane to Kettle Falls, will take you past slopes of ponderosa pine, lodgepole pine and Douglas fir. Patches of flowers color the roadsides: the reds of scarlet gilia and sky rocket; the blues of lupine and blue bells; the yellows of Arrowleaf Balsamroot and arnica; the whites of mockorange, serviceberry, oceanspray, and nine-bark; and the purples of

**Botanists** study plants and are interested in plant diversity, so as they hike they tally the

phacelia, fireweed, and aster.

species they see. Have you ever made a list of all the plants you recognized from an area? If you don't know the name of a plant, make up your own and keep a

tally. You might be surprised at

Arrowleaf Balsamroot Of

number

how much more you see if you list them.

Two plants recognized as rare in Washington occur in the crazyweed and Nuttall's pussey-toes. Columbia crazyweed has cream-colored flowers and is related to lupines. Although much of its habitat was flooded, it is still found along some rocky beaches about water level. The white -flowered Nuttall's pussey-toes grows in openings under Ponderosa forests.

The best way to see plants is to spend some time hiking in an area. Always hike with a map, water, lunch and rain gear and be alert for rattlesnakes. Poison ivy and stinging nettles are a part of our plant diversity, so watch what you touch.

Field guides to plants, berries, weeds and flowers are available through the NWIA bookstores in the Kettle Falls Visitor Information Center, Fort Spokane Visitor Center, Spring Canyon Contact Station and park Headquarters in Coulee Dam.

#### Come celebrate the variety in bloom along Lake Roosevelt!

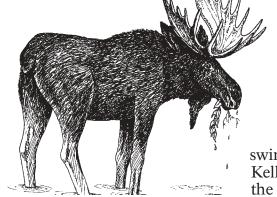
This article was written by Kathy Ahlenslager, botanist for the U.S. Forest Service at Colville National Forest.

#### Before the waters behind Grand Coulee Dam

filled in valleys below 1200 feet in elevation, botanists collected plants and tallied 415 different kinds in the area that would be flooded. Thomas Rogers described the project and the plant diversity he found from the Canadian border to Grand Coulee Dam in his 1941 master's thesis, "A Plant Survey of the Upper Columbia River in Washington."

"The vegetation of the area is as diverse as its geology and ranges from sagebrush in the Grand Coulee to cedar forest at the Canadian boundary, and from species of sun-scorched talus slopes to moisture-loving marsh and aquatic plants. The vegetation is best considered as composed of two main types, grassland and forest, in various combinations and modifications. The grassland type dominates the Grand Coulee and the valley of the Columbia about as far up the river as the mouth of the Spokane [River]. From this point on, forest species begin to appear in significant numbers, mingling with grassland and eventually, far up the river, replacing it completely."

Moose are on the Loose at Lake Roosevelt broad, flat, palmated antlers



According to Washington State Fish &

estimated to live in Washington. Most are in the northeastern counties of Pend Oreille, Stevens, and Spokane. Occasionally, moose are spotted in the counties of Okanogan and Ferry.

Moose sightings at Lake Roosevelt have included moose Moose are dark brown and browsing in Hawk Creek Campground and running through the parking lot of the Visitor Information Center at Kettle Falls. There have been several sightings in the town of Kettle Falls, and outside of Wilbur. One was even seen

swimming at Keller Ferry. As the largest

Wildlife, at least 400 moose are member of North America's deer family, the moose, (Alces alces), is unforgettable whether viewed from a distance or encountered up close. Its sheer size commands respect. Its uniqueness makes it a curiosity.

#### Description

long-legged with massive shoulders. They have prominent muzzles with an overhanging upper lip, and a large flap of hair- covered skin that hangs beneath the throat called a "bell." Adult males or bulls have

tipped with a number of points, depending on his age and health. Yearling males have birth to a new calf. Some forked antlers until they are about five years old when the familiar palmated rack has developed. Antlers are shed at winter and regrown each spring.

Washington's moose belong to a subspecies called "Shira's" moose, which is physically smaller than more northerndwelling moose. Adults measure nearly six feet at the shoulder. A bull's antler spread can be as much as 6-1/2 feet across. Bulls weigh between 850 and 1,100 pounds and adult females or cows weigh between Moose are a pioneering type 600 and 800 pounds.

Moose tend to be loners, except for cows and their calves. Breeding occurs in the fall and single or twin calves

are born in June. Calves often live with their mothers until the cow drives them off to give yearlings regroup with the family several weeks after birth and remain with the cow for up to two years. Black bears and cougars are among the most common predators of moose calves in Washington. Generally moose prefer forested habitat where lakes, marshes, and other wetlands provide them with aquatic vegetation and willows. In less wet areas, like northeast Washington, they also eat the woody browse in early stages of regrowth following disturbances like fires and logging. animal and adapt to a variety of available forage. With its great size and forage demands, the home range of the average moose in any given season is about three to six square miles.

#### The Past and Present Indigenous People of the Columbia River

As an interpretive park ranger for the National Park Service at Lake Roosevelt, I have had the opportunity to research and learn more about my history. My research for the summer of 2001 was the history of the indigenous people who inhabited the Columbia River area prior to the completion of Grand Coulee Dam in 1941. The descendents of these people continue to live along the lake and still have the hope that the salmon, which could no longer reach the upper Columbia after the dam was completed, will one day return to the river.

Much was lost in 1941. Ten towns that existed along the river at that time were either moved or destroyed. These included the towns of Plum, Keller, Lincoln, Peach, Hunters, Inchelium, Gifford, Kettle Falls and Marcus. Other important areas that became affected by the completion of the dam were areas utilized by tribal people for thousands of years. Many of these areas were located at the confluence of the Columbia River and the tributaries of the Kettle River, Sanpoil River and Spokane River. Falls were located near the confluences of the Kettle and Spokane River, providing convenient places for salmon to be caught when they returned to their spawning grounds.

My focus was to educate visitors of the local tribal history and bring an awareness that tribal people still exist today. There are many tribes that coexist together such as the Plateau Tribes of the Pacific Northwest, which include the Confederated Tribes of the Colville Reservation, Spokane Tribe of Indians, and the Yakima Nation. I belong to the Confederated Tribes of the Colville Reservation and am an enrolled member. There are twelve bands that form the Confederated Tribes of the Colville Reservation. They are the Entiat, Chelan, Wenatchi, Methow, Moses/ Columbia, Nespelem, Sanpoil, Palouse, Chief Joseph Band of the Nez Perce, Okanogan, Colville, and the band I belong to, the Arrow Lakes Band or Lakes Band. The importance and history of each tribe should be told by an individual who can convey the history through their own tribal culture and traditions. The greatest opportunity for a tribal member is to talk about their history and

people. This opportunity came for me last summer. I felt the visitors to Lake Roosevelt had minimal information on the tribal history of Columbia River tributaries.

Today the Columbia River has many admirable features for recreational purposes, and many visitors come to Lake Roosevelt for many different reasons. One of the reasons is that year after year, families return to Lake Roosevelt. In some cases, people are now bringing their grandchildren or greatgrandchildren. Historically, tribal



families also returned year after year to the same areas along the Columbia River.

The tributaries that flowed into the Columbia River were important to tribal people who lived in the area for over 10,000 years. The river was home and a way of life for the many tribes that coexisted together. The river was the source that brought numerous tribes together for fishing, hunting, and intertribal marriages. These times of gathering were also times for sharing and providing food for the people to prepare for the time summer shelters and a general of the "white", meaning winter. There was a time for everything and a time in which to do it. The river provided a way and a source for their survival for hunting and gathering.

The Kettle Falls, Spokane Falls, and Sanpoil River were significant to the tribal people for their survival. The yearly cycle began at the river and finished at the river. The people had encampments near the river for warmer conditions and easy access to firewood during the winter months. With every season there was a celebration beginning with the month, "time that the buttercups bloom," which corresponds roughly

to March. During the following month, "time that the leaves come out," the people would notify the chief of their intended destination and move across the river to the root fields. The root digging activities opened with the celebration of the "first roots ceremony".

The summer fishing season began about the first of May, when sturgeon and small fish were available. Trout and salmon appeared soon afterwards. The people moved to the fishing areas

> and the largest fishing traps were located at the mouth of the Sanpoil River, the mouth of the Spokane River and at Kettle Falls. The elders stayed in the winter camp and were cared by able body members. Only the strong traveled great distances to the hunting and fishing grounds. Like the root digging, the salmon season was initiated with a ceremony of "the first salmon rite". This celebration

lasted for five days and was the most elaborate ceremony outside of the winter season. Each day the salmon was distributed equally by the salmon chief among the people at this time everyone gathered. The women were not idle with their time; theirs were the tasks of cooking and drying the salmon and of gathering berries in their spare time.

About the first of September the dried salmon was temporarily stored on the flat tops of the disbanding of the group took place. Some went into the mountains to gather the fall roots and to hunt. Others went directly to the fall fishing grounds where they speared the silver and dog salmon from canoes or caught them with seines. A closed structure was necessary for the fall salmon had to be dried indoors by the heat of the campfire. The heat from the sun was no longer great enough to dry the salmon.

The completion of the yearly cycle was coming to the end and the winter encampments were reoccupied by October, "the time of

the falling leaves." All dried foods were placed in their permanent storage places and the men began the work of reconstructing and repairing the winter shelters. The tule mats were woven and sewed by the women and the rye grass was collected to cover the floor of the lodge. The men also cut or gathered the supply of wood and the women carried it in to the lodges.

The three-midwinter months November, December and January were descriptively named: "time that it snows", "time that it gets cold", and "time that it is white." The people spent most of their time indoors and the woman made baskets and mats, fashioned and mended clothing, and prepared the meals. The men went on occasional hunting trips but when left with idle time they spent it playing games, telling stories or sleeping. There was a welcomed break in the season. The ceremonial period of the year came at midwinter. Dances were held in continuous succession for as long as two months. Families traveled from one dance to another for the duration of that period. At the end of the series of "winter dances" all were more content to await the coming of spring.

Today, part of the visitor's experience is invited to learn about the past and to share the presence of the past and present indigenous people that still live along the Columbia River. The yearly cycle of the past can be compared to the present experience of the visitor. The return of visitors to the river every year for the season beginning in May and closing in September, is much like what has occurred here traditionally. The history is meant to be shared and to give the visitor a better understanding of the people who were here before this area became part of the National Park Service.

I end my season with great admiration to those who came before us and their memories. I thank the visitor for their interest and hope I have brought some insight to the history of the tribal people who live along the Columbia River and Lake Roosevelt.

This article was written by Jennifer Ferguson, a member of the Lakes band of the Colville Confederated Tribes, and valued member of the National Park Service staff at Lake Roosevelt National Recreation Area.

# Did you Know?

# Frequently Asked

# Why does the lake level fluctuate? How does the National Park Service affect it?

The National Park Service is one of five managing partners on Lake Roosevelt. Originally the lake was formed for flood control, irrigation and power generation. Recreational opportunities are only a by-product of those other efforts. The lake level is determined by the Corps of Engineers for flood control, Bonneville Power Administration for power production, the Bureau of Reclamation for irrigation, and a host of interests for fisheries mitigation. The National Park Service remains an advocate for recreational use of the reservoir, but has no authority to change the policies of the other federal agencies.

#### What is the lake level?

You can call the Bureau of Reclamation at Grand Coulee Dam at 1-800-824-4916 or check our website at www.nps.gov/laro/home.htm for daily lake elevations.

# Why can we have beach fires on the Colville and Spokane Reservations but not within the National Recreation Area?

Beach fires are not allowed within the National Recreation Area from May I to November I, when fire season is at its most dangerous. Unlike the Reservations, the National Recreation Area consists of a relatively narrow strip of public land adjoined by private land, much of which is being developed for homes, etc. It wouldn't take much for a fire, even on the beach, under the right conditions (wind, etc.) to escape to the adjoining private lands threatening homes, livestock and other private property. That is why NPS regulations prohibit beach fires during the summer season.

The Colville and Spokane Reservations allow campers to have beach fires with a fire permit. During high wildfire potential, fire permits may not be issued. You must have your permits before you get to your site. For non-Tribal member camping rules, fee schedules and permit vendors on the Colville Reservation call (509)634-3145, and for fire permits call (509)634-3105. For information about fire permits on the Spokane Reservation call (509)258-7750.

### Can we collect things we find on the beach or use metal detectors?

Collecting anything (short of garbage) is not allowed in National Park units. Everything, from Native American artifacts to flowers, is protected at Lake Roosevelt.

The possession or use of metal detectors, electronic detection equipment and ground penetrating devices is **strictly prohibited**.

# Can we use off- road vehicles or dirt-bikes on the exposed lakebed or beaches?

No. Driving off- road on any part of the beaches or exposed lakebed, whether you are on National Park Service administered land or either of the Reservations, is strictly prohibited. Fines can be very large if you do.

#### Are there any showers in the campgrounds?

The National Park Service has not built any shower facilities at Lake Roosevelt. However several businesses located near the lake in many areas offer pay showers.

# Can noncitizens get the Golden Age or Golden Access passes?

No, because it is a program funded by taxes. You must be a full time resident or citizen of the Unites States to receive its benefits.

# Forest Health at Lake Roosevelt continued from page 1

When fire is excluded from fire adapted ecosystems, characteristic species and structures may be lost as new processes develop. This is happening around Lake Roosevelt, where most fires have been excluded since the 1920s. Gradually much of the area has converted to dense forests with understories that include heavy brush and many Douglas fir seedlings. This overcrowding has reduced the vigor of the ponderosa pines, making them less able to produce the resins and terpenes that protect them from bark beetles. As fire frequency has decreased, the frequency of insect outbreaks has increased. Visitors to the Park now can see groups of ponderosa pines killed by western pine beetles.

Sometimes it is said that disturbance caused by bark

beetles will take the place of fire, but there are important differences. Unlike lowintensity fire, which usually kills only small trees, these beetles prefer to kill large trees that have been stressed by some disturbance. In

historic times, the Ponderosa pine struck by lightening beetles would have found a few suitable trees that had been damaged by lightning or wind. These days, many large trees are sufficiently stressed by overcrowding that they can be overcome by bark beetles. If the beetles find enough suitable trees to build up a large population, even more vigorous trees may be attacked and overcome by sheer numbers. As fire continues to be excluded, fuel in the form of beetle-killed trees and high brush will build up in the forest. Conflagrations, such as the 1988 fires in the Greater Yellowstone Area, have taught us that fire cannot be excluded from these ecosystems forever. The fire regime can only be changed from frequent, lowintensity to infrequent, high intensity, which will cause even more dramatic changes in ecological communities.

The Park Service has recognized the importance of fire in ecosystems since the late 1960s, when the first prescribed natural fire program (allowing lightning fires to burn under certain conditions) was approved in Sequoia and Kings Canyon National Parks. By 1995, 20 parks had established such programs, and many others had begun actively igniting fires to return this process to the ecosystem. Some parks are meeting their ecosystem restoration goals by burning alone. In other parks, small trees are being cut down with chainsaws and the branches scattered prior to burning. These small trees would have been thinned naturally by fire a century ago. Left standing they can form a "ladder," to carrying lethal flames into the crowns of large, old trees. Once thinning has returned forest structure to

something more closely resembling its historic condition, that structure can usually be maintained by underburning alone.

Lake Roosevelt
National Recreation
Area will be carrying
out a program of
thinning and
underburning to
return fire to its role as
an ecosystem process,
and to reduce the risk
of high-intensity fire

that could threaten both the Park and surrounding property. As C.F. Cooper wrote in 1961, "Fire has played a major role in shaping the world's grassland and forests. Attempts to eliminate it have introduced problems fully as serious as those created by accidental blazes." A program of thinning and underburning is an important step toward saving the Park's large ponderosa pines from bark beetles and, in a larger context, preserving its natural ecosystem functions.

#### For more information visit: Link to the Sequoia and Kings Canyon Fire Information: <a href="http://www.nps.gov/seki/fire/indxfire.htm">http://www.nps.gov/seki/fire/indxfire.htm</a>

Link to the Lake Roosevelt Fire Management Plan Environmental Assessment: <a href="http://www.nps.gov/laro/firemanagement.htm">http://www.nps.gov/laro/firemanagement.htm</a>



# Facilities and Services

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#### KELLER FERRY

Marina store with deli, groceries, ice and fishing licenses. Public telephones. Houseboat, boat, and boat slip rentals. Boat fuel dock with boat dump station (free to all boaters) and fresh water during summer months. Campground and restrooms nearby.

June 26 through September 10 - Store open 8 AM to 6 PM, daily. Fuel dock 8 AM - 7 PM and boat rental services open 8 AM through 7 PM, daily.

While all services are available in the spring from May 1 through June 25 and in the fall from September II through October 30, the hours vary and we suggest you call for further information.

Operated by Roosevelt Recreational Enterprises (RRE), 45751 SR21 N Wilbur, WA 99185, (509)647-5755 or (800)648-5253 (Washington and Oregon only) for houseboat rentals. www.tworiverscasinoandresort.com

#### **SPRING CANYON**

Visitor Contact Station, restrooms, public phone and snackbar are located adjacent to the National Park Service picnic area, playground and campground.

Snackbar is operated by Roosevelt Recreational Enterprises (RRE), 45751 SR 21 N Wilbur, WA 99185. Phone: (509)647-5755.

#### TWO RIVERS

Marina store with groceries, ice and fish licenses. Full service restaurant. Public telephones. Boat slip rentals. Boat fuel dock with boat dump station (free to all boaters) and fresh water during summer months. Campground with hookups and water, showers, restrooms, and coin-operated laundry facilities nearby. Gas station and conve nience store with a deli.

June through September 7 the marina store is open 7:30 AM to 7:30 PM, daily. Restaurant open 9 AM to 1 AM, Sunday - Thursday, 24 hours Friday and Saturday. Gas station open 7 AM -10 PM daily. While all services are available in the spring and in the fall, the hours vary. Please call for further information.

Operated by The Spokane Tribe of Indians at 6828 B Hwy. 25 S., Davenport, WA 99122. Call (800)722-4031, or (509)722-

www.tworiverscasinoandresort.com

#### PARK BOOK-**STORES**

Northwest Interpretive Association sells educational materials, books, maps, toys, and collector's items in the Visitor Information Center at Kettle Falls, the Visitor Center at Fort Spokane, the Park Headquarters office in Coulee Dam, and the Visitor Contact Station at Spring Canyon campground. www.nps.gov/laro/nwia.htm



Directional Sign at Davenport

#### SEVEN BAYS

Marina store with souvenirs, groceries, ice and fishing licenses. Fast -food restaurant. Public telephones. Boat slip rentals. Boat fuel dock with boat dump station (free to all boaters) and fresh water during summer months. Campground with hookups and water, showers, restrooms, and coin-operated laundry facilities.

June 16 through September 17, store open 8 AM to 8 PM. daily. Restaurant open weekends only from May 12 to June 16, 11 AM to 8 PM From June 17 to September 17 from 11 AM to 8 PM M-F, 8 AM to 8 PM on weekends. Fuel available 8 AM to 8 PM daily.

the spring from May I through Memorial Day and in the fall from September 5 through October 30, the hours vary. Call for further information.

Davenport, WA 99122. Phone: (509)725 -1676. www.rrehousboats.com

#### KETTLE FALLS

Full service marina adjacent to National Park Service campground. Rentals include houseboats, runabouts and kayaks. Covered or open boat slips on secured dock for seasonal or short term moorage. Boat fuel dock with boat dump station (free to all boat ers). Propane available.

June 1 through June 30, open 8 AM to 6 PM. July 1 through Labor Day weekend, open 8 AM to 7 PM. After Labor Day, October 1 open 8 AM to 6 PM. After hours, please call (509)738-6121 for service by appointment.

Operated by Lake Roosevelt Resort and Marina, P.O. Box 340, Kettle Falls, WA 99141. Phone: (509)738-6121 or (800)635-7585 (Canada, Wash ington, Idaho, and Oregon only).www.lakeroosevelt.com

#### **DAISY STATION**

While all services are available in Boat fuel dock with fresh water. Store nearby with groceries, ice, fishing supplies, gift/craft items, microwave and propane. Picnic tables. Open 6 AM to 7 PM seven days a week all year.

Operated by RRE, Rt. 1, Box 624, Operated by Sally Shute, Daisy Station, 2990 Highway 25 South, Rice, WA 99167. Phone: (509)738-6166.

# Partners at Lake Roosevelt











#### HELPFUL PHONE NUMBERS

Daily Lake Levels: (800)824-4916 or www.nps.gov/ laro/home.htm

Grand Coulee Dam Visitor Arrival Center: (509)633-9265 tours of the dam and laser lightshow information.

Game Warden to report poaching, cougar or bear encounters M-F 8-5: (800)477-6224

Colville Confederated Tribal Police: (800)551-5800, Fish & Wildlife: (509)634-2110

Spokane Indian Tribal Park Rangers: (509)258-7750, Police: 911

For EMERGENCIES in the park dial 911. If you are using a cell phone you must tell the 911 operator exactly where you are as they may be located out of state.